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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/633,709

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Paul Kunisch

GR 98 P 1128 P

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EXAMINER

TIEU, BINH KIEN

ART UNIT

PAPER NUMBER

2643

14

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/633,709

Applicant(s)

KUNISCH ET AL.

Examiner

BINH K. TIEU

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/24/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to rejections of claims 5-10 have been considered but are moot in view of the new ground(s) of rejection as followings.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Toole et al. (U.S. Pat. #: 5,889,856 as cited in the previous Office Action) in view of Betts (U.S. Pat. #: 6,584,078).

Art Unit: 2643

Regarding claims 5, O'Toole et al. ("O'Toole") teaches a method of handling telephone signals supplied by an analog telephone set and data supplied by a data terminal in subscriber line circuit of a digital telephone switching system (i.e., integrated line card of a central office as shown in figure 6) used at least in subregions for data transmission (col.7, lines 1-30), which comprises:

connecting a telephone set and a data terminal with a modem to a subscriber line circuit of a digital telephone switching system through a common analog subscriber line (col.7, lines 31-43);

at least one of:

subjecting data supplied by the data terminal to a sampling operation at a sampling rate above a sampling rate required for telephone information during analog/digital conversion (col.8, lines 36-47; col.9, lines 7-10 and lines 37-51);

feeding data originating from and handled by the data terminal directly to a data transmission network (col.8, lines 48-54).

It should be noticed that O'Toole fails to clearly teach the features of subjecting the data outgoing to the digital telephone switching system to an analog-digital conversion at a sampling rate above a sampling rate requires for a telephone information and coding incoming data from the digital telephone switching system according to a digital to analog conversion using a linear characteristic, as argued by Applicants in their remarks. However, Betts teaches such features in col.4, lines 35-39; col.5, lines 10-45 and col.7, line 1 – col.9, line 3 for a purpose of matching the sampling rate of the analog modem's receiver with the sampling rate of the network digital modem.

Art Unit: 2643

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the features of subjecting the data outgoing to the digital telephone switching system to an analog-digital conversion at a sampling rate above a sampling rate requires for a telephone information and coding incoming data from the digital telephone switching system according to a digital to analog conversion using a linear characteristic, as argued by Applicants in their remarks, as taught by Betts, into view of O'Toole in order to synchronize or to match the sampling rate among clients' receivers and the sampling rate of the network.

Regarding claim 6, O'Toole further teaches limitations of the claim in col.9, lines 7-21.

Regarding claim 7, O'Toole teaches a subscriber line circuit handling telephone signals supplied by an analog telephone set and data supplied by a data terminal in subscriber line circuit of a digital telephone switching system (i.e., integrated line card of a central office as shown in figure 6) used at least in subregions for data transmission (col.7, lines 1-30), comprises:

- a telephone set for producing telephone signals (i.e., telephone set 10 shown in figure 2);
- a data terminal having a modem for producing data signals (i.e., ADSL modem 14);
- an analog subscriber line (i.e., telephone line 20), said telephone set and said data terminal directly connected to a subscriber line circuit of a digital telephone switching system through said analog subscriber line (i.e., integrated line card of a central office as shown in figure 6; col.7, lines 31-43);

- an analog/digital converter (i.e., A/D converter 44, col.8, lines 36-43; col.9, lines 7-12; and col.9, lines 37-42) having a sampling rate required for telephone information, said analog/digital converter:

Art Unit: 2643

connected to said telephone set and said data terminal;
receiving said telephone signals and said data signals; and
producing digital signals (col.7, lines 31-52); and
a digital signal processor (i.e., DSP 50) reducing said digital signals at least when said digital signals represent telephone signals to a transmission bit rate for telephone transmission and simultaneously coding said telephone signals according to a nonlinear characteristic (col.8, lines 12-20 and col.9, lines 5-51).

It should be noticed that O'Toole fails to clearly teach the features of subjecting the data outgoing to the digital telephone switching system to an analog-digital conversion at a sampling rate above a sampling rate requires for a telephone information and coding incoming data from the digital telephone switching system according to a digital to analog conversion using a linear characteristic, as argued by Applicants in their remarks. However, Betts teaches such features in col.4, lines 35-39; col.5, lines 10-45 and col.7, line 1 – col.9, line 3 for a purpose of matching the sampling rate of the analog modem's receiver with the sampling rate of the network digital modem.

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the features of subjecting the data outgoing to the digital telephone switching system to an analog-digital conversion at a sampling rate above a sampling rate requires for a telephone information and coding incoming data from the digital telephone switching system according to a digital to analog conversion using a linear characteristic, as argued by Applicants in their remarks, as taught by Betts, into view of O'Toole

Art Unit: 2643

in order to synchronize or to match the sampling rate among clients' receivers and the sampling rate of the network.

Regarding claim 8, O'Toole further teaches limitations of the claim in col.8, lines 36-54 and col.9, lines 28-51.

Regarding claim 9, O'Toole teaches in a digital telephone switching system used at least in subregions for data transmission (i.e., integrated line card of a central office as shown in figure 6, note col.7, lines 1-30), comprises:

- a telephone set for producing telephone signals (i.e., telephone set 10 shown in figure 2);

- a data terminal having a modem for producing data signals (i.e., ADSL modem 14);

- an analog subscriber line (i.e., telephone line 20), said telephone set and said data terminal directly connected to a subscriber line circuit of a digital telephone switching system through said analog subscriber line (i.e., integrated line card of a central office as shown in figure 6; col.7, lines 31-43);

- an analog/digital converter (i.e., A/D converter 44, col.8, lines 36-43; col.9, lines 7-12; and col.9, lines 37-42) having a sampling rate required for telephone information, said analog/digital converter:

 - connected to said telephone set and said data terminal;

 - receiving said telephone signals and said data signals; and

 - producing digital signals (col.7, lines 31-52); and

- a digital signal processor (i.e., DSP 50) reducing said digital signals at least when said digital signals represent telephone signals to a transmission bit rate for telephone transmission

Art Unit: 2643

and simultaneously coding said telephone signals according to a nonlinear characteristic (col.8, lines 12-20 and col.9, lines 5-51).

It should be noticed that O'Toole fails to clearly teach the features of subjecting the data outgoing to the digital telephone switching system to an analog-digital conversion at a sampling rate above a sampling rate requires for a telephone information and coding incoming data from the digital telephone switching system according to a digital to analog conversion using a linear characteristic, as argued by Applicants in their remarks. However, Betts teaches such features in col.4, lines 35-39; col.5, lines 10-45 and col.7, line 1 – col.9, line 3 for a purpose of matching the sampling rate of the analog modem's receiver with the sampling rate of the network digital modem.

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the features of subjecting the data outgoing to the digital telephone switching system to an analog-digital conversion at a sampling rate above a sampling rate requires for a telephone information and coding incoming data from the digital telephone switching system according to a digital to analog conversion using a linear characteristic, as argued by Applicants in their remarks, as taught by Betts, into view of O'Toole in order to synchronize or to match the sampling rate among clients' receivers and the sampling rate of the network.

Regarding claim 10, O'Toole further teaches limitations of the claim in col.8, lines 36-54 and col.9, lines 28-51.

Art Unit: 2643

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Betts (U.S. Pat. #: 6,421,320) and Betts (U.S. Pat. #: 6,366,565) are related Applications to the cited patent as applied above.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (703) 305-3963 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (703) 305-4708 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.**

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Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).



**BINH TIEU
PRIMARY EXAMINER**

Art Unit 2643

Date: May 24, 2004